

## **Reno County**

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 6/12/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 29 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Reno County economy.<sup>1</sup>

These 29 sectors have a total direct output of approximately **\$1.28 billion** and support **3,677 jobs** in Reno County. Running the model for all 29 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Reno County Economy									
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	Output % of Gross Regional Product			
Direct Effect	3677.0	9.89%	\$254,189,446	10.70%	\$1,278,544,722	53.83%			
Indirect Effect	1887.3	5.08%	\$120,751,341	5.08%	\$251,401,997	10.58%			
Induced Effect	1109.2	2.98%	\$71,933,214	3.03%	\$130,787,775	5.51%			
Total Effect	6673.5	17.95%	\$446,874,002	18.81%	\$1,660,734,494	69.92%			

As shown in the above table, agriculture, food, and food processing sectors support 6,674 jobs, or 17.95% of the entire workforce in the county. These sectors provide a total economic contribution of approximately \$1.66 billion, roughly 69.92% of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 29 agriculture, food, and food processing sectors is approximately \$446.9 million, or 18.81% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 18.81% of the total economy.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: http://www.implan.com/index.php?option=com\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **1,058 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Reno County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment					
Sector	Total Employment	Total Output			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1,057.7	\$117,505,033			
Farm machinery and equipment manufacturing	528.9	\$252,910,059			
Meat processed from carcasses	482.4	\$248,778,279			
Wholesale trade	311.9	\$63,389,402			
Landscape and horticultural services	294.0	\$14,730,528			
Truck transportation	274.8	\$31,951,815			
Grain farming	237.5	\$81,182,893			
Support activities for agriculture and forestry	221.0	\$9,026,715			
Management of companies and enterprises	150.1	\$24,853,055			
Paperboard mills	142.3	\$121,075,196			

The farm machinery and equipment manufacturing sector directly contributes approximately **\$252.9 million** to the Reno County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output				
Sector	Total Employment	Total Output		
Farm machinery and equipment manufacturing	528.9	\$252,910,059		
Meat processed from carcasses	482.4	\$248,778,279		
Flour milling	104.9	\$146,986,167		
Paperboard mills	142.3	\$121,075,196		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1,057.7	\$117,505,033		
Grain farming	237.5	\$81,182,893		
Wholesale trade	311.9	\$63,389,402		
Spice and extract manufacturing	99.1	\$54,400,943		
Oilseed farming	52.7	\$50,261,716		
Fluid milk manufacturing	61.7	\$46,579,905		

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Reno County economy.

All Agriculture, Food, and Food Processing Sectors					
Sector	Total Employment	Total Output			
Oilseed farming	52.7	\$50,261,715.77			
Grain farming	237.5	\$81,182,893.20			
Vegetable and melon farming	4.6	\$710,913.31			
Fruit farming	2.2	\$148,963.08			
Tree nut farming	0.2	\$29,688.65			
Greenhouse, nursery, and floriculture production	37.9	\$3,918,154.78			
Cotton farming	0.9	\$173,173.62			
All other crop farming	124.1	\$8,698,875.57			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1057.7	\$117,505,033.22			
Dairy cattle and milk production	31.7	\$9,952,416.88			
Poultry and egg production	2.0	\$1,301,580.37			
Animal production, except cattle and poultry and eggs	76.9	\$8,587,411.32			
Commercial logging	3.3	\$149,455.76			
Commercial hunting and trapping	6.8	\$136,907.87			
Other chemical and fertilizer mineral mining	75.0	\$15,791,794.85			
Other animal food manufacturing	33.4	\$44,955,490.71			
Flour milling	104.9	\$146,986,167.18			
Frozen specialties manufacturing	92.8	\$34,176,249.85			
Fluid milk manufacturing	61.7	\$46,579,904.60			
Meat processed from carcasses	482.4	\$248,778,278.97			
Bread and bakery product, except frozen, manufacturing	58.7	\$7,659,910.62			
Frozen cakes and other pastries manufacturing	2.5	\$412,731.64			
Spice and extract manufacturing	99.1	\$54,400,942.95			
Breweries	0.8	\$244,032.70			
Paperboard mills	142.3	\$121,075,195.99			
Farm machinery and equipment manufacturing	528.9	\$252,910,059.18			
Food product machinery manufacturing	2.5	\$618,518.30			
Veterinary services	59.3	\$6,467,732.26			
Landscape and horticultural services	294.0	\$14,730,528.29			

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Reno County, the retail sector was omitted.